

WE CLAIM:

1. A device model agent (DMA) provision method comprising:
providing a core device model;
providing at least one interface to an operating system of a device; and
providing a service environment in which services for the device can run.
2. The method of claim 1 further comprising providing a service manager.
3. The method of claim 1 further comprising providing an object manager.
4. The method of claim 1 further comprising providing a user interface with which a user controls the DMA.
5. The method of claim 4 wherein the user interface is provided by a service manager.
6. The method of claim 1 wherein providing a service environment comprises:
running a service environment in a host application on a server;
providing the service environment with contact information of the device for which a service is to run; and
providing a communications medium through which the service environment can communicate with the device, the communications medium and a protocol being compatible with the device.
7. The method of claim 1 wherein providing a core device model comprises:
running a core device model for the device in a host application on a server;

providing the core device model with contact information of the device for which the core device model runs; and
providing a communications medium through which the core device model can communicate with the device, the communications medium and a protocol being compatible with the device.

8. The method of claim 1 wherein providing a core device model comprises:

providing an add-on component, running a core device model for the device in the add-on component;
and connecting the add-on component to the device for which the core device model runs.

9. The method of claim 1 wherein providing a service environment comprises running a service environment on the add-on component.

10. In a device including an operating system, a network connection, a device runtime environment, and a web server running in the device runtime environment, a device services provision method comprising:

providing a device model agent in the device runtime environment;
providing in the device model agent a services environment;
providing at least one service that can run in the services environment, the at least one service creating a services layer when running;
providing in the device model agent a core device model;
providing in the core device model a service manager performing a service management method comprising:
loading the at least one service;
unloading the at least one service; and

managing the at least one service; and
providing in the device model agent a device interface in communication with at
least one API of the device operating system.

11. In a device model agent (DMA) comprising at least one device interface, a service environment, and a core device model including a service manager, a DMA operation method comprising:

- booting the DMA;
- starting the service manager;
- loading core services with the service manager; and
- checking with a service supplier;
- receiving service configuration;
- interpreting and processing service configuration parameters;
- loading and starting subscribed services; and
- initiating a loop in the service manager comprising:
 - checking with a service supplier;
 - receiving service configuration;
 - interpreting and processing service configuration parameters;
 - loading and starting newly subscribed services;
 - stopping and unloading newly unsubscribe services; and
 - monitoring services.

12. In a device model agent (DMA) comprising at least one device interface, a service environment, and a core device model including a service manager, a DMA operation method comprising:

providing a user interface;

presenting a user with a list of available services;

allowing the user to select a service;

allowing the user to customize a service; and

ordering a service.